Information

Recorded water levels in this bulletin are derived from a representative network of water level gages on each lake (see cover map). Providers of these data are the U.S. Department of Commerce, NOAA, National Ocean Service, and Integrated Science Data Management, Department of Fisheries and Oceans, Canada. The Detroit District, Corps of Engineers and Environment Canada derive historic and projected lake levels under the auspices of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data.

This bulletin is produced monthly as a public service. Tables of possible storm-induced rises at key locations on the Great Lakes are available on request. The Corps also publishes the "Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths," weekly, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. Internet address **http://www.lre.usace.army.mil/glhh** contains this information on the Internet.

Great Lakes Basin Hydrology
October 2011

The Lake Superior basin experienced below average precipitation in October, while the Lake Michigan-Huron, Lake Erie and Lake Ontario basins received above average precipitation. Over the past 12 months, Lake Superior received below average precipitation, while Lake Michigan-Huron has received above average precipitation. Above average precipitation also fell on the Lake Erie and Lake Ontario basins over the last 12 months. Precipitation over the entire Great Lakes basin was above average in October and above average over the past 12 months. In October, the net supply of water to the Lake Superior basin was below average, while it was above average to the Lake Michigan-Huron, Lake Erie and Lake Ontario basins. The tables below list October precipitation and water supply information for all Great Lakes basins.

A comparison of October monthly mean lake levels to long-term average (1918-2010) shows Lakes Superior and Michigan-Huron were 12 and 15 inches, respectively, below average. While, Lakes St. Clair, Erie and Ontario were 1, 8 and 2 inches, respectively, above average in October. Boaters should be aware of hazards to navigation due to continued below average water levels on the upper lakes.

PRECIPITATION (INCHES)

BASIN	October				12-Month Comparison			
	2011	Average (1900-2008)	Diff.	% of Average	Last 12 months	Average (1900-2008)	Diff.	% of Average
Superior	2.31	2.86	-0.55	81	28.91	30.51	-1.60	95
Michigan-Huron	3.33	2.87	0.46	116	34.22	32.44	1.78	105
Erie	4.38	2.77	1.61	158	48.05	35.40	12.65	136
Ontario	4.01	3.10	0.91	129	40.18	35.71	4.47	113
Great Lakes	3.28	2.88	0.40	114	35.43	32.64	2.79	109

LAKE	October WATER SUPPLIES[1] (cfs)		October OUTFLOW[2] (cfs)	
	2011	Average[4] (1900-1989)	2011	Average[3] (1900-1999)
Superior	-6,000	40,000	55,000	80,000
Michigan-Huron	88,000	1,000	172,000	191,000
Erie	25,000	-21,000	215,000	201,000
Ontario	24,000	7,000	260,000	243,000

Notes: Values (excluding averages) are based on preliminary computations; cfs denotes cubic feet per second.

[1] Negative water supply denotes evaporation from lake exceeded runoff from local basin.

[2] Does not include diversions.

[3] Niagara and St Lawrence rivers average outflows are based on period of record 1900-1989 and 1900-2005, respectively

[4] Lakes Erie and Ontario average water supplies based on 1900-1989